Strength & Conditioning Newsletter

Summer Issue
Simply stated, during the off-season you’re doing one of two things: getting better or getting worse.

In a few weeks you will complete your final examinations and depart GW for a summer at home. It will mark a much-deserved time away from the demands placed on you as student athletes. I’m sure it is a time you are anxiously awaiting. Ironically, as your strength and conditioning coaches, it is a time we are always anxious about. While away from Foggy Bottom we hope you continue your training.

Many of you will be home for approximately 3 months, May 15th to August 28th. That’s 105 days, 15 weeks that you must train at your own discretion. In my experience there are 3 scenarios created over the summer.

1. Athletes that don’t lose a step. Adhere to the summer program 100%
2. Athletes that miss a few sessions, but train weekly.
3. Athletes that forget about training.
I can live with the first two scenarios, but the third is unacceptable. If you miss 3 months of training you aren’t helping yourself or your team. The science and theory behind our strength programs is based on periodization. The framework of our periodization models is based on weekly percentage increases of 2.5% of true maximum. These percentage increases equate to 5-7 pounds of weight added to your core lifts (squat, bench, deadlift) weekly. You will likely see a decrease of 75-105 pounds if you miss 15 weeks of training. Probably 37.5-52.5 pounds if you miss 6-8 weeks.

This decrease is catastrophic to your performance as everything revolves around strength. If your strength decreases your speed and power will likely take a hit. These are facts based on research and years of experience. This information is not intended to scare you but to keep you informed about the risk of lackluster training. The result 99.9% of the time is lackluster results.

In short, while on summer break please TRAIN! A lot of time is put into your summer program. When you receive it please thoroughly review it and email your strength coach with questions. We are available via email or phone daily throughout the summer and love hearing from you.

Enjoy your summer and expect to be tested when you return to campus next Fall. Your testing performance will show your coaches if you trained. Whether positive or negative, the numbers never lie.

**Fuel Smart. Train Hard. Work your Plan.**
As the end of the school year approaches and most teams’ seasons and training start to wind down, it’s time to start thinking about summer training objectives. Some athletes may continue into another season of training and competition, while others may be focused on maintaining fitness until the fall. Either way, every athlete should consider these steps before departing for the year:

**STEP 1** DETERMINE YOUR PERFORMANCE AND BODY COMPOSITION GOALS.

In order to have a nutrition plan, you have to first decide your performance and body composition goals in the off-season. Typically, they fall into one of the following categories:

1) Gain muscle mass and/or body weight, improve strength
2) Lose body fat and/or body weight, improve power to weight ratio
3) Maintain body weight and/or body composition

**STEP 2** CREATE A NUTRITION PLAN.

Once you have determined your goals, it’s time to create and carry-out a nutrition plan. Taking the above categories one step further, here are general nutrition guidelines to help you achieve your goals:

1) Gain muscle mass and/or body weight, improve strength
   a. Adequate protein intake to support muscle growth: 0.7-0.8 grams/lb body weight
   Example: 105-120 grams protein per day for 150 lb athlete
   b. Increased overall calories (in particular carbohydrates) to support muscle building
   Example: Minimum extra 500-1,000 calories per day to support weight gain
   c. Strength and resistance work. Extra protein doesn’t build muscle – you have to do the work, too!

2) Lose body fat and/or body weight, improve power to weight ratio
   a. Increased protein intake to prevent muscle loss during weight loss
   Example: 120-140 grams protein per day for 150 lb athlete
   b. Decreased overall calories (combination of carbohydrates and fat)
   Example: Maximum 500-1,000 calorie reduction per day to support weight loss
   c. Addition of or increase in cardiovascular work as needed

3) Maintain body weight and/or body composition
   a. Adjust calorie intake based on change in activity level from in-season to off-season.
   Example: Decrease carbohydrate and fat intake if less active in the summer

So, before you take off for the year, be certain to discuss your goals with your coach and training team. Take advantage of the resources available within the Strength and Conditioning department and leave for the summer with a plan in place.
We would all do well to remember this. Intensity and volume are inversely related. If training volume (time, reps) is at its maximum, then intensity (how hard you are working in the moment) will be at its lowest, relative to your maximum. If you are driving yourself to workout longer, realize that every second you train, you are either consciously or unconsciously, driving yourself towards working out less hard. Unfortunately many of us, including myself at times, have a tendency to be impressed with how much time we put into something. What we need to be concerned with in our training is how much intensity are we investing. How hard is every rep as opposed to how hard is every minute? There was a time in my competitive years when I did around 1,600 repetitions of abdominal work every week (I had a lot of time in those days). Nowadays, I focus more on intensity and my total repetitions per week are nowhere near 1,600. Yet, I have a more functional core when compared to before. We should be less impressed with the time and reps, and more impressed with the quality and intensity of our reps. Time is precious, so use it wisely. Less is actually more, when you train harder.
Posture and body language go a long way in sports. Seeing your opponent hunched over, gasping for air builds your confidence as you realize he or she is tired and you're not. Body language can say a lot about how a person looks on the outside, but it also may say something about what's going on inside.

Amy Cuddy, a researcher at Harvard University, has shown that simple adjustments in posture, from “low power” poses to “high power” poses, can increase an individual's testosterone levels while reducing his or her cortisol levels. Increasing testosterone has been linked with improvements in confidence, leadership abilities, and risk tolerance. The stress hormone cortisol, conversely, is associated with a diminished immune system, memory loss, and hypertension.

So what is a “high power” pose? Well, think of Wonder Woman, with her hands on her hips, feet spread apart, and chest raised up. The 2 keys to a power pose are expansiveness (i.e. taking up more space) and openness (spreading the limbs out as opposed to hunching over). Switching your posture from a “low power” pose to a “high power” pose led to a 20% increase in testosterone and 25% decrease in cortisol!

When you find yourself on the field, or in the weight room, and you’re struggling mentally to build confidence, simply change how you’re standing. Stand up straight, spread your feet, put your hands on your hips, and, as the old adage goes, fake it ‘till you make it!

Strength & Conditioning

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